

HOW TO GROW NATIVE TREES.

(By CAPTAIN E. V. SANDERSON.)

Our native trees require somewhat different treatment from many exotics, and flourish best in communities or groves. If you look at the nearest bush covered hill-top you will of course see that the indigenous trees grew there despite the exposure to winds and storms. Why? Because they came up *en masse*, one sheltering and shielding the other. Therefore let us adopt Nature's plan. We first of all plant those trees which eventually shall be permanent. These should be placed sufficiently far apart so that they will mass upon maturity. As, for instance, a Pohutukawa (*Metrosideros tomentosa*) will cover a circle about twenty feet in diameter, while a Hinau (*Elacocarpus dentatus*) will similarly cover a thirty-foot diameter circle, a Kowhai (*Edwardsia microphylla*), say, 15 feet. Such sufficient spacing will allow ordinary crown development when fully grown. Now fill the spaces in between these permanent trees with some suitable nurse plant, such as Taupata (*Coprosma retusa*), if on the coast; Karamu (*Coprosma robusta*), or such cheap and handsome shrubs as Lacebark or Houhere (*Hoheria populnea*), Mahoe (*Melicytus ramiflorus*), Rangiora (*Brachyglottis repanda*), or other similar quick growing plants. All plants chosen should be suited to the local climatic conditions and soil, and one cannot go far wrong in this if species are chosen which grow naturally or once grew in the locality. As our grove grows the nurse plants must be kept from over-crowding the plants which are intended for permanence by cutting back or as time goes on cutting out altogether where necessary. The soil during the initial stages should be kept free from grass and strong growing weeds by merely keeping the surface stirred. Digging should be avoided because most of our trees are surface feeders and digging will damage the roots. In from two to three years the nurse plants, which should be spaced about six feet apart, will have closed together and all necessity for further cultivation is removed. All leaves, dead sticks, etc., should be left on the surface to form a humus covering. In the initial stages it is preferable to choose plants other than those whose habitat is the forest proper as these require shade. A forest has first of all its fringe or should have. This on the coast would naturally be usually Taupata growing right down to the water edge as it once did in many parts before the introduction of plant-eating animals. Inside this next comes the outskirts, Ngaio, Karaka, Tarata, Koheriki (*Melicope ternata*),